DOCUMENT RESUME

ED 437 928 IR 019 892

AUTHOR	Dillenbourg, Pierre, Ed.
TITLE	Collaborative Learning: Cognitive and Computational Approaches. Advances in Learning and Instruction Series.
ISBN	ISBN-0-08-043073-2
PUB DATE	1999-00-00
NOTE	246p.; Book is one of the outcomes of the European Science Foundation's scientific program, "Learning in Humans and Machines."
AVAILABLE FROM	Elsevier Science, Inc., P.O. Box 945, Madison Square Station, New York, NY 10160-0757 ($72). Web site: http://www.elsevier.com.
PUB TYPE	Books (010) -- Collected Works - General (020)
EDRS PRICE	Document Not Available from EDRS.
DESCRIPTORS	*Cognitive Psychology; Computer Oriented Programs; *Computer Science; *Cooperative Learning; Interaction; Interdisciplinary Approach; *Problem Solving
IDENTIFIERS	*Collaborative Learning; Knowledge Development; *Machine Learning; Scholarly Communication

ABSTRACT

Intended to illustrate the benefits of collaboration between scientists from psychology and computer science, namely machine learning, this book contains the following chapters, most of which are co-authored by scholars from both sides: (1) "Introduction: What Do You Mean by 'Collaborative Learning'?" (Pierre Dillenbourg); (2) "Learning Together: Understanding the Processes of Computer-Based Collaborative Learning" (Karen Littleton and Paivi Hakkinen); (3) "The Role of Grounding in Collaborative Learning Tasks" (Michael Baker, Tia Hansen, Richard Joiner, and David Traum); (4) "What Is 'Multi' in Multi-Agent Learning?" (Gerhard Weiss and Pierre Dillenbourg); (5) "Comparing Human-Human and Robot-Robot Interaction" (Richard Joiner, Kim Issroff, and John Demiris); (6) "Learning by Explaining to Oneself and to Others" (Rolf Ploetzner, Pierre Dillenbourg, Michael Preier, and David Traum); (7) "Knowledge Transformations in Agents and Interactions: A Comparison of Machine Learning and Dialogue Operators" (Engelbert Mephu Nguifo, Michael Baker, and Pierre Dillenbourg); (8) "Can Analytic Models Support Learning in Groups?" (H. Ulrich Hoppe and Rolf Ploetzner); (9) "Using Telematics for Collaborative Knowledge Construction" (Tia Hansen, Lone Dirckinck-Holmfeld, Robert Lewis, and Joze Rugelj); and (10) "The Productive Agency that Drives Collaborative Learning" (Daniel L. Schwartz). Contains an index. (Contains 425 references.) (MES)

Reproductions supplied by EDRS are the best that can be made
from the original document.